

Ted Wynne Engineering/Contractor, Inc.

417 WELSHWOOD DRIVE • SUITE 114 • NASHVILLE, TN 37211
PHONE: 615- 331-7660 • FAX: 615- 333-0764

December 7, 1999

Ms. Sharon Jordan
Tennessee Valley Authority
P.O. Box 1010
Muscle Shoals, Alabama 35662-1010

Re: Hartselle Site (Hole # 3)
Hartselle, Alabama

This office performed a test on a 203 feet deep, 6 inch diameter vertical bore, backfilled with native tailings and sand , November 29, 1999. The following data was derived from test data:

Thermal Conductivity	1.7 BTU/HR-F
Ground Temperature	60.3 F


We feel that based on our observation of the terrain, the above is representative of the area where field bores will be located for this project.

The driller's log is attached for your information.

Please let us know if any additional information is needed.

Sincerely,

TED WYNNE ENGINEERING CONTRACTORS, INC.


Ted Wynne, P.E.

jdh



Drill Log

Hartselle Elementary School Site

(Hole #3)

<u>Depth</u>	<u>Conditions</u>
0-6'	Reddish brown clay
6-16'	Red to yellowish sandstone - moist
16-21'	Soft sandy limestone
21-23'	Sand (soft) with dirt seam
23-41'	Sandy limestone - hard and soft
41-43'	Soft limestone with shale seam
43-83'	Sandy limestone - soft & hard spots
83-103'	Soft gray limestone - void at 93' started dusting - lost water
103-123'	Soft gray limestone - a lot of shaley lime
123-149'	Soft gray shaley limestone - maybe med clay
149-163'	Gray, medium limestone
163-183'	Gray limestone - med to hard - green shale
183-203'	Hard & med gray limestone

WELL LOG

Layne-Western Company

A Division of Layne, Inc.

TEST

PERMANENT

Job No. 52-17817

Well Log No. #3 City ~~Watts~~ - Hartsale County

Owner T. V. A. Township

Section

Location State al

From Land Description

From Street or Road off Hwy 36 on Bethel Road - NE

FROM NATURAL GROUND LEVEL	FORMATION FOUND - DESCRIBE FULLY			
	Depth to Top of Stratum	Depth to Bottom of Stratum	Thickness of Stratum	Static Water Level
Reddish Brown clay	0'	6'	6'	
Red to yellowish sand stone moist	6'	16'	10'	
Soft sandy limestone	16'	21'	5'	
Sand (soft) with dirt seam	21'	23'	2'	21'
Sandy limestone - Hard + soft	23'	41'	18'	
Soft limestone with shale seam	41'	43'	2'	41'
Sandy limestone - soft + hard spots	43'	63'	20'	
Same as the above	63'	83'	20'	
Soft gray limestone void at 93' lost water	83'	103'	20'	
Soft gray limestone a lot of shaly lime	103'	123'	20'	
Soft gray shaly limestone major clay	123'	143'	20'	
Same as the above	143'	148'	5'	
Same as the above Gray med lime	148'	163'	15'	
Gray limestone med to hard green shale	163'	183'	20'	
Hard med to gray limestone	183'	203'		
gray limestone				

Hole 6" Dia Drilled by: Cable Tool Rotary Air Jetting
 Reverse Circ. Bucket Auger
 Rotary Hole Grouted: Neat Cement Drilling Mud Other
 Casing " OD From " above ground to " feet below ground. Weight Pounds per foot
 Screen " Set from to feet Make Type Slot
 Pumping test GPM drawdown to feet after hours pumping
 Date Completed 11-6-99 Driller: Rick Bickley
 Log 7/92

85/109992 20:21 6667/31/77